

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Confirmation No. 3946

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Application No. 10/787,004

Filed: February 24, 2004

For: **SINGLE-END-MOUNT SEISMIC
ISOLATOR**

Attorney Docket No. 61098/2:2

Group Art Unit: 3683

Examiner: Devon C. Kramer

Date: March 3, 2006

PRE-APPEAL BRIEF REQUEST FOR REVIEW

TO THE COMMISSIONER FOR PATENTS:

Applicant requests review of the final rejection of claims 1-29 in the Office action dated November 3, 2005 in the above-identified application.

This request is being filed with a Notice of Appeal.

Claims 1-30 are in the application, of which claims 1, 13, and 23 are in independent form. Claim 30 is withdrawn from consideration. No amendments are being filed with this request.

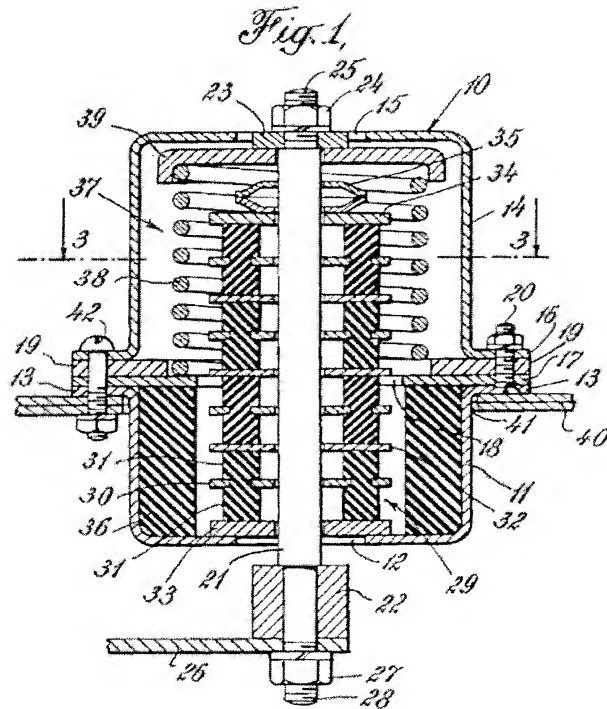
Claims 1, 4, 7-9, 11-17, and 19-21 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 2,678,796 of Roy ("Roy"). Claims 10 and 22-29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Roy, in view of U.S. Patent No. 3,973,078 of Wolf et al. ("Wolf"). Applicant believes the rejections are clearly in error and requests review.

Reasons for Requesting Review

The Office action identifies Roy as providing a device capable of acting as a seismic isolator for a structure supported on a mounting surface. The Office action identifies the lower cup 11 and follower 33 of the isolator of Roy as corresponding to the base of the structure recited in the claims. The Office action also identifies an arm 26 of

the object “O” supported by Roy (see Fig. 7 of Roy) as corresponding to the mounting surface recited in the claims on which the structure is supported. Thus, the Office action identifies part of the Roy isolator itself as the structure isolated by it and further identifies part of Roy’s isolated object “O” as the mounting surface on which the isolated structure is supported, seemingly ignoring the manner in which the Roy isolator operates.

Fig. 1 of Roy is reproduced at right. Contrary to the assertion made in the Office action, Roy does not disclose a structure to be isolated that is “supported on a mounting surface.” Rather, the lower cup 11 of Roy, which is identified in the Office action as corresponding to the “structure” recited in the claims, is secured to a rigid support 40 of Roy by bolts 42. (Roy at col. 3, ll. 58-61). The alleged mounting surface of Roy (arm 26 of object “O”) is actually part of the isolated object, suspended from a pair of opposing isolators (see Roy at Fig.



7, identifying upper and lower mounts 76 and 79 supporting object “O”). Roy simply does not teach a “seismic isolator for a structure supported on a mounting surface”, as recited in claim 1. By identifying part of the object “O” and isolator lower cup 11 of Roy as corresponding to the respective mounting surface and supported structure recited in the claims, the Office action turns the teachings of Roy on their head and mischaracterizes elements described therein. Because the lower cup 11 of Roy is bolted to the rigid support 40, clearly any seismic shock or external force applied to the system would be transmitted directly through rigid support 40 to the lower cup 11 (i.e., to the structure identified by the Office action), without allowing any relative motion therebetween and without any attenuation by any resilient elements of the Roy isolator (such as the dished metallic discs 35 and spring 38 identified in the Office action). Consequently, Roy fails to anticipate claim 1, which requires that the claimed resilient element “allow relative motion between the mounting surface and the structure in the event of seismic shock . . . and to absorb or dissipate energy of such relative motion, *thereby attenuating the effect on the structure*

of the seismic shock or other external applied force.” The isolator of Roy does not teach an isolator with a resilient element for attenuating the effects on lower cup 11 of seismic shock or other external applied force.

Similarly, with respect to claim 13, the Office action fails to identify a structure having a base that is supported on a mounting surface. The lower cup 11 and follower 33 (identified in the Office action as corresponding to the “base”) is not supported on the arm 26 of object “O”.

The Office action also fails to identify where Roy teaches an actuator “extending along the load shaft”, as claimed in claim 13. The elements of Roy identified as corresponding to the claimed actuator—i.e., rings 17 and 19 of Roy—encircle the rod 21 of Roy and extend perpendicular thereto, but do not extend “along” the rod 21 to any extent. Claim 13 also requires that the actuator have opposing mounting and driving ends. The Office action identifies a follower ring 34 of Roy as corresponding to the “driver” (of claim 1). However, the follower ring 34 is not at an end of the rings 17 and 19 of Roy, which are alleged to correspond to the claimed actuator. The Office action also fails to identify a “mounting end” of the alleged actuator (rings 17 and 19) that is located “proximal of the first end of the load shaft”, as required by claim 13.

With respect to dependent claim 8, the Office action fails to identify in Roy an item of electric power equipment supported by the alleged structure (i.e., by lower cup 11 and follower 33), as required by the claims. The Office action merely states that the device of Roy is capable of supporting electrical equipment.

With respect to dependent claim 9, the Office action argues that Roy teaches an arrangement where no part of the isolator extends below the base of the structure supported (i.e. below the lower cup 11 and follower 33 of the Roy isolator). The Office action states that “Roy meets this limitation as much as the instant application because the instant application has the stud (22) extending below the base.” However, the claims do not specify the stud (22) as an element of the claimed seismic isolator. On the other hand, the claims do specify that the load shaft is an element of the seismic isolator; and, according to claim 9, no part of the load shaft or any other part of the claimed seismic isolator extends below the base of the structure. In contradistinction, the load shaft of Roy clearly extends below the alleged base (lower cup 11 and follower 33), as shown in Fig. 1.

With respect to dependent claim 11, the Office action identifies upper cup 14 of Roy as corresponding to the claimed “cap” secured to the second end of the load shaft, as claimed. However, the upper cup 14 is not secured to rod 21 of Roy. Rather, the upper

cup 14 includes a central opening 15 through which the rod 21 and a washer 23 may freely move. (Roy at col. 2, ll. 54-55 and col. 3, ll. 4-8). Consequently, the upper cup 14 of Roy is also not “adjustably secured to the load shaft” (i.e. to rod 21), as required by claim 12.

With respect to dependent claims 14 and 15, Roy does not disclose a friction spring, as claimed. The Office action admits as much by the indication of allowability of claim 2.

In making the rejection under Section 103(a), the Office does meet its initial burden because the cited patents of Roy and Wolf provide no suggestion or motivation to utilize any particular method and, regardless, the combination of Roy in view of Wolf does not teach or suggest all of the claim limitations. The Office action fails to set forth a *prima facie* case of unpatentability with respect to the combination of the references cited. Notwithstanding the arguments submitted in the Response filed July 29, 2005, the present final Office action articulates no basis whatsoever for the combination of Roy and Wolf teaching the method recited in claim 23.

Claim 23 recites a “seismic retrofitting method for an existing structure of the type including a base supported on a mounting surface and secured to the mounting surface via a threaded mounting stud” that is possible “without moving the structure.” The Office action does not articulate any support whatsoever explaining how the prior art teaches such a method, instead relying on the conclusion that “Roy teaches all of the limitations in the claims . . . but the lack of teaching of a mounting stud” and that “Wolf et al teaches a mounting stud.” Thus, the Office action appears to assert that Roy and Wolf teach all the structural limitations of the claims. Assuming *arguendo* that the Office action were correct that all the structural limitations of claim 23 are all in the prior art, which applicant does not admit, the Office action still does not and cannot find that all of the method steps of claim 23 and its dependent claims are taught or suggested by Roy in view of Wolf.

“To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.” *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985); MPEP §706.02(j). Neither Roy nor Wolf, offers any suggestion of a method for retrofitting a structure. Regardless, the combination does not teach all of the limitations of the claim. The cited references do not teach a seismic retrofitting method “for an existing structure,” providing “an actuator aligned with the load shaft,” or attaching the load shaft


“without moving the structure.” The cited references also fail to teach loosening or removing a nut from a nut from the mounting stud, as recited in claim 23. In fact, the cited references teach no retrofitting method at all. The mere possibility that the method of claim 23 might be utilized to create a completed apparatus similar to certain prior art apparatuses does not make the method itself obvious. The Office action fails to articulate how a method of assembling the structures of Roy and Wolf in combination would result in the claimed method, and applicant asserts that it would not. For example, the Office action does not assert that the isolator of Roy might be installed (in the system of Wolf or otherwise) to retrofit a structure having a base supported on a mounting surface *“without moving the structure”*, as required by claim 23. Such a method of installation would not be possible with the damping devices of Roy and Wolf, which are both designed to be positioned between the structure to be isolated and the mounting surface on which the structure is supported. For the forgoing reasons, applicant submits that claim 23 and dependent claims 24-29 are patentable over Roy in view of Wolf.

With respect to claims 10 and 22, neither Roy nor Wolf teaches or suggests a “load shaft . . . secured to the mounting surface via a threaded mounting stud that extends outwardly from the mounting surface *and through the base of the structure*”.

Applicant respectfully asserts that the rejections of claims 1, 4, 7-9, 10-17, and 19-29 are clearly improper and based on errors in the facts. Accordingly, the application should be allowed.

Respectfully submitted,

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